AUG 2 0 2001

510(k) SUMMARY

"This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92."

"The assigned 510(k) number is: K012122."

Submitter: Maine Standards Company
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Summary prepared on: June 29, 2001

Proprietary Name: VALIDATE Chem 5 Calibration Verification Test Set
Common Name: Calibration Verification
Classification Name: Calibrator, Multi-Analyte

Predicate Devices:

1. **DOCUMENT** Iron/Magnesium/Triglyceride CAL-VER, K893142, manufactured by CASCO NERL Diagnostics.

Device description: VALIDATE Chem 5 Calibration Verification Test Set is a liquid, human serum based calibration verification test set containing multiple levels used establish the relationship between theoretical operation and actual performance of the included analyte Each set contains one bottle each of six (6) levels, including zero. Each bottle contains 5 milliliters.

Intended use: VALIDATE Chem 5 Calibration Test Set is intended for *in vitro* diagnostic use in quantitatively verifying calibration, validating reportable ranges, and determining linearity in automated, semi-automated and manual chemistry systems for the following analyte: iron.

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Comparison of VALIDATE Chem 5 Calibration Verification Test Set to the predicate devices:

Table 1 compares characteristics of the VALIDATE Chem 5 Calibration Verification Test Set with those of the DOCUMENT Iron/Magnesium/Triglyceride CAL•VER.

TABLE 1. Comparison of Products

	VALIDATE CHEM 3 Calibration Verification Test Set	DOCUMENT Iron, Magnesium, Triglyceride CAL•VER
Catalog #	10003	M-103
Intended Use	For *in vitro* diagnostic use in quantitatively verifying calibration, validating reportable ranges, and determining linearity in automated, semi-automated and manual chemistry systems.	For *in vitro* diagnostic use in the quantitative determination of linearity in manual, automated and semi-automated chemistry systems.
Analytes	FE	FE
Matrix	aqueous	aqueous
Number of Levels	6 including Zero	5
Preparation	Liquid, ready to use	Liquid, ready to use
Packaging	5.0 mL each level	10.0 mL each level
Stability	Until Expiration	Until Expiration
Storage	2-8°C	2-8°C

The performance of VALIDATE Chem 5 Calibration Verification Test Set solutions on the Roche Diagnostics Hitachi 911 instrument system as compared to DOCUMENT Iron/Magnesium/Triglyceride CAL•VER, has been shown to be substantially equivalent using pre-production lots of VALIDATE Chem 5 Calibration Verification Test Set. The results of correlation comparisons between the VALIDATE Chem 5 Calibration Verification Test Set and the predicate device are presented in Table 2.

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TABLE 2. Linear Regression Statistical Comparison of VALIDATE Chem 5 Calibration Verification Test Set to the predicate devices.

	VALIDATE Chem 5 Calibration Verification Test Set		DOCUMENT Iron, Magnesium, Triglyceride CAL•VER	
Analyte	Correlation Coefficient (r)	Regression Equation Y=intercept + slope(X)	Correlation Coefficient (r)	Regression Equation Y=intercept + slope(X)
FE	0.99999	1.498 + .992	0.99992	-3.464 + 1.021

Summary:

Linear regression analysis was carried out on recovered values for iron. The analyte was tested in triplicate. The VALIDATE Chem 5 Calibration Verification Test Set has been shown to be functionally equivalent for calibration verification and linearity assessment to DOCUMENT Iron/Magnesium/Triglyceride CAL•VER.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration
2098 Gaither Road
Rockville MD 20850

AUG 2 0 2001

Ms. Christine V. Beach
Manager, RA/QA
Maine Standards Company, LLC
765 Roosevelt Trail
Windham, ME 04062

Re: 510(k) Number: K012122
Trade/Device Name: VALIDATE Chem 5 Calibration Verification Test Set
Regulation Number: 862.1660
Regulatory Class: Class I, Reserved
Product Code: JJX
Dated: July 3, 2001
Received: July 6, 2001

Dear Ms. Beach:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Good Manufacturing Practice for Medical Devices: General (GMP) regulation (21 CFR Part 820) and that, through periodic GMP inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4588. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsma/dsmamain.html".

Sincerely yours,

Steven Gutman

Steven I. Gutman, M.D., M.B.A.
Director
Division of Clinical Laboratory Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

INDICATIONS FOR USE STATEMENT

510(k) Number: K012122

Device Name: VALIDATE Chem 5 Calibration Verification Test Set

Indications for Use:

The VALIDATE Chem 5 Calibration Verification Test Set is used by trained laboratory professionals for quantitatively verifying calibration, validating reportable ranges, and determining linearity in automated, semi-automated and manual chemistry systems for the following analyte: iron.

Concurrence of CDRH, Office of Device Evaluation (ODE)

✓ Prescription Use (Per 21 CFR 801.109) OR Over-The-Counter Use

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Kesia Alexander for Jean Cooper
(Division Sign-Off)
Division of Clinical Laboratory Devices
510(k) Number K012122